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ABSTRACT

This publication provides an introduction to basic concepts that form the core of economics education and gives a framework for curriculum planning and teaching. A brief introduction addresses the topic "Why study economics?" One major reason for promoting economic education may be to create a literate voting population. Fourteen concepts are then discussed. The first concept is "economic wants," wants that all people have for materials, goods, and services. "Productive resources" is the second concept. There are three productive resources that must be present for production to occur: natural resources, capital goods, and human resources. Concept number three is "scarcity and choice." The fourth concept of "opportunity costs and trade-offs" is a major one in dealing with the economic problem of scarcity. In a mixed market economy such as ours, the greatest "economic incentive" (concept five) behind economic behavior is individual self-interest. Modern industrial economies are based on the sixth concept discussed--"specialization, division of labor, and comparative advantage." The remaining concepts discussed include interdependence; markets, supply, and demand; the price mechanism; aggregate supply and productive capacity; aggregate demand, unemployment and inflation; money and monetary policy; fiscal policy, and saving and investment. (Author/RM)

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An Economics Primer For Educators

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Foreword

Whether we want to or not, all of us, students and adults alike, participate in our economic system. The wisdom with which we participate affects not only our own lives but also the lives of everyone else in our society as well. This impact on others makes economic education a high educational priority, reflected in one of the State Board of Education's Goals for Public School Education in Texas that states students should acquire economic competence. This competence is to include "knowledge of the fundamental economic structure and processes of the American system, of the contributions of free enterprise, and of the opportunities for individual participation and success in the system."

This publication is designed to aid educators as they include economic education in their curriculum. It provides an introduction to basic concepts that form the core of economics education and gives a framework for curriculum planning and teaching.

Alton O. Bowen
Commissioner of Education

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Introduction: Why Study Economics?

Economics is a course of study that has significant impact on the future of students' lives. The more students comprehend about the economic rules of our society as well as other societies, the better able they will be to achieve and enjoy the quality of life which our society offers.

Whether we want to or not, we all participate in economics at three levels: personally, professionally, and politically. Economic judgments we make affect our own lives as well as the lives of others in our society. Therefore, economics is an important educational endeavor. Improved understanding not only helps the individual directly, but it also has a significant and positive impact on all segments of our society.

By studying economics, the student learns the personal role of economic rules in daily life. Some of the issues that face us constantly include why people are paid for work, how to plan for inflation, why some investments return more than others, and how the function of collective bargaining operates. More important to society, however, the student learns that each of us must produce more than we consume if we want our country to make progress.

In studying economics, the student sees the importance of personal saving and investing of money as the stimulus that builds new houses, finances new research, and creates new jobs.

The student should also learn that his or her personal economic habits will have a significant impact on whether we stagnate, regress, or progress as a society.

The student's future professional performance is also enhanced by economic education. Clarification is given to issues such as: why some jobs pay more than others, the role of competition, what profit means, and the function of government regulation. To the benefit of society, the student learns the economic importance of personal productivity. Students also discover that personal income demands that are not tied to increased productivity simply cause increased inflation.

By studying economics, the student can become a knowledgeable participant in political economics. The student learns what a school bond election means; the importance of opportunity cost in considering the construction of a new city cultural center; the impact of political decisions in inflation; and much more. It is in this realm of citizenship that society benefits the most. A better understanding of economics means more knowledgeable participation at the ballot box.

No matter where we are in the world, we function under some economic system. Here in Texas, we operate with the system that has been the most productive in the world for both quantity of goods and services and quality of life. Yet, over the years, we have made substantial ballot box decisions that have changed our economic system markedly.

Some people say the changes are going to "kill the goose that lays the golden eggs." Others say the changes are "correcting old inequities and advancing our society."

Unfortunately, few people casting ballots have the economic understanding on which to base their votes. Trying to change a system without first understanding the system is a foolish approach.

The greatest reason to promote economic education may be to create a literate voting population. How people vote affects all of us. The fact that most people vote with no economic knowledge or understanding is a prime reason economic education is important to all of us.

WHAT ECONOMICS IS ALL ABOUT

Concept One: Economic Wants

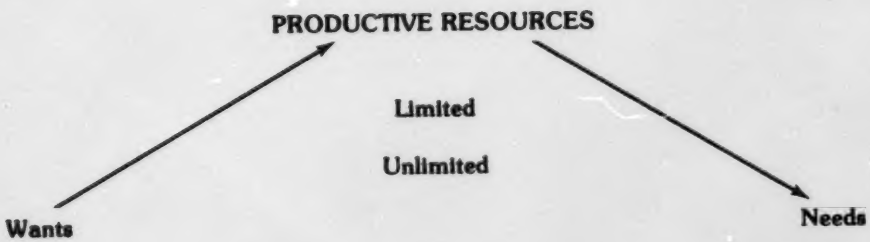
Economic wants are wants that all people have for materials, goods, and services. These wants cover a very wide range of things from the very basic wants of food, shelter, and clothing to wants that perhaps are not so basic such as a minicalculator, a microwave oven, or cosmetic surgery. The very basic *wants* are desires for goods and services that all people have. Many of these wants are individual or personal in nature. The desire for a new camera is an example of an individual or personal want. Remember that a personal want is not necessarily a basic need.

Some wants are for goods and services that are collective in nature. Collective wants are for goods or services that society decides it is better or more efficient to provide through government agencies. For example, the government agencies of defense, education, and transportation provide services that satisfy some of our collective wants. Almost one-third of the resources and one-fourth of the work force in the American economy are devoted to satisfying collective wants.

Regardless of whether they are individual or collective wants, these *wants* are basically *unlimited* in nature. As individuals, all of us would probably like a new car, a larger home, or a new suit. Most of us would also like to do more traveling, to send our children to college, to have the orthodontist correct our children's teeth, and to have our children take music lessons. Obviously, every American cannot have each of these personal economic wants satisfied.

Most of us also have a problem with our collective wants. We cannot have all our collective wants satisfied. Many Americans would like to have such things as a better defense system, a cleaner environment, good highways, rapid transit, improved parks and recreational facilities, and better police protection. Some Americans would like to have such things as a national health insurance program, others want government assisted day care centers. Improved benefits or opportunities for disadvantaged Americans is desired by still others, and quality education for all Americans at all age levels is a widely shared goal. As is true of our individual wants, we know we cannot satisfy all of the *collective wants* of the citizens of the United States. You can see then that our *economic wants*, both individual and collective, are unlimited.

The economic concept of unlimited wants and needs is an important one for several reasons. First, it needs to be made clear that the issues that are dealt with in economics are closely related to the material aspects of our lives. Secondly, this concept, *unlimited wants*, coupled with the concept of *productive resources*, leads to the concepts of *scarcity* and *opportunity cost*. These concepts define the central economic problem faced by all individuals and all societies.


PRODUCTIVE RESOURCES
Limited
Unlimited
Wants
Needs

Concept Two: Productive Resources

For our economic wants to be satisfied, goods and services must first be produced. The economist identifies *three basic factors* or productive resources that must be present for production to occur. They are the following:

- *Natural Resources*—Natural resources are the basic building blocks of production. All societies must have natural resources in some quantity to produce a good or service. Texans are well aware of some of the unique natural resources that exist in our state: fertile farm land, good supplies of water, petroleum, and forests. Some natural resources such as water, forests, and land fertility are renewable. Others such as oil and coal are used up on the process of production. They are, therefore, lost to us forever.

- *Capital Goods*—Capital goods are those things that are used to produce other goods and services. They include money, machines, tools, and factories. No society can maintain its present standard of living without putting some of its resources into capital goods. The accumulation of capital goods is an absolute necessity for all societies. However, all societies do not use the same techniques to accumulate capital goods. For example, the market economy of the United States uses retained earnings (profit) as a major source of capital accumulation. The Soviet Union uses government planning and allocation of resources to build its store of capital goods. The important point is that both societies accumulate money capital. In some of the less well-developed nations economically, little money capital is accumulated and held for future economic expansion. Most of the resources are used to produce consumer goods.

- *Human Resources*—Human resources are the skills, talents, and abilities of the people of any society. The number of people available for the labor force will also have a dramatic impact on a society's economic development. Also involved in the factor of human resources is the quality and motivation of the work force. It is up to the people to combine the proper blend of natural resources, capital goods, and human resources to produce goods and services efficiently..

These three types of *productive resources* are necessary for all production. The quantity and quality of these resources determine the economic standard of living for any society. While three types of *productive resources* are always necessary for production, they are also limited in nature at any one given time. This is a crucial point to understand.

To illustrate at this time in our history that natural resources are limited is not a difficult task. At one time or another, almost any magazine or newspaper you read will contain articles about some kind of natural resource that is in limited supply. Almost everyone is acutely aware that our energy supply, which comes directly from natural resources, is limited. In fact, according to economists, any resource that has a price is limited in supply.

It is perhaps more difficult to illustrate the limited nature of capital and human resources; nonetheless, they are limited. Consider the shortage of doctors in the United States, especially in the rural areas of states like Texas. Also are there enough mechanics, plumbers, and electricians in your community? Think about the need for capital goods necessary to produce the energy that the nation needs now. Do we have enough? Also, think about the enormous amount of capital goods that will be involved in the development of alternative sources of energy for the future. Clearly, the amount of natural resources, human resources, and capital goods available for production at any given time is indeed limited.

Concept Three: Scarcity and Choice

By combining the basic ideas of *economic wants* and *productive resources*, we can see the relationship between them, a relationship that poses a basic problem for any society. When the individual and collective wants of the society are combined, they exceed the society's ability to produce the goods and services necessary to satisfy them. Economists define this combination of *unlimited wants* and *limited resources* as *scarcity*.

Once the concept of scarcity become operative, it is obvious that all *economic wants* cannot be satisified. Therefore, *choices* must be made. Sometimes these choices are made in a very structured fashion as in a centrally-planned economy. Sometimes these choices are made in the mixed market economy as in the United States. The problem of making choices compels the society to allocate or to divide its scarce resources among the production of various goods and services. This pattern of allocation is called *an economic system*.

Every economic system is faced with three basic questions with which it must deal:

- *What and How Much?*—Somehow each society must decide whether it is going to use the scarce resources for capital goods such as schools, buildings, factories or for consumer goods such as automobiles, television sets, tape decks, or other consumer goods. In the mixed market economy of the United States, this question is generally answered in two ways. For about three-fourths of our resources, this decision is made through the use of the concepts of *supply* and *demand* (see page 21). About one quarter of our resources are allocated through "ballot decisions" that are made by our elected representatives at various levels of government.

- *How?*—How will goods and services be produced? Will they be produced by the government or by private enterprise? Will the economic system emphasize technology and mass production or will it emphasize the use of human resources? How will *productive resources* be shifted from one use to another? How will the economic system generate the capital necessary to sustain the present standard of living or to provide for economic growth? All of these questions must be answered by every economic system as it organizes its *productive resources*.

- *For Whom?*—Put very simply this question makes us realize that every system must decide who gets the goods and services that are produced. Since there are not enough goods for everyone, the following three questions become very important: who will have most all of their wants satisfied; who will have their wants partially satisfied; and who will have very few of their wants satisfied? In market oriented economies like that of the United States, the question of who gets what is answered through the *income* that the person has available to spend. For example, the family with a large annual income will be able to obtain more gallons of expensive gasoline than the family with a poverty level income.

By using such concepts as *scarcity* and *choice* in economic education , we are able to explain the reality of "real world" economics. Common sense ideas tell us that people must be prudent consumers. Obviously, everyone cannot have everything they want. Even the most affluent families have some economic wants they are unable to satisfy. Like everyone else, they also must make choices between alternative uses of their resources.

Although the United States is an affluent nation, it does not have the resources necessary to satisfy all of the *economic wants* of all of its citizens. That is a reality that all citizens must face at one time or another.

Concept Four: Opportunity Costs and Trade-Offs

The concept of *opportunity cost* is a major one in dealing with the economic problem of scarcity. *Opportunity cost* can be defined as that which is given up when decisions are made to use a resource in a particular way. For example, a nation may decide that it is more important to produce military hardware than to build automobiles. Giving up the possibility of citizens' owning new automobiles is the opportunity cost of producing additional military hardware. Every economic decision carries with it *opportunity costs* – that which has been given up in this particular use of resources.

Obviously, steel that is used to build an automobile cannot be used to build a factory, a train, or a truck. Wood used for the production of paper cannot be used for the construction of homes. Aluminum used to make beverage containers cannot be used to build an airplane. Oil used for lubricating automobile engines is not available for producing plastics or chemicals. Water used on lawns or for industrial purposes is not available for irrigation.

Put another way, the *opportunity cost* of attending a football game might be a stereo tape recording. The *opportunity cost* of purchasing a home might be an annual summer vacation. In other words, you will have to give up something in order to get something else that you want more. Thus, *choice* is involved in every economic decision. You must always make a *trade-off*.

The concept of *opportunity cost* is a very practical concept since its application goes further than personal finance. It can also be used to analyze the benefits and costs of solutions to a variety of social and economic problems. Some of these problems and concerns are pollution control; adequate health care for all Americans; and personal, industrial, or agricultural use of water. Americans must think carefully about the costs of economic decisions, whether they be personal decisions or decisions that apply to the entire society.

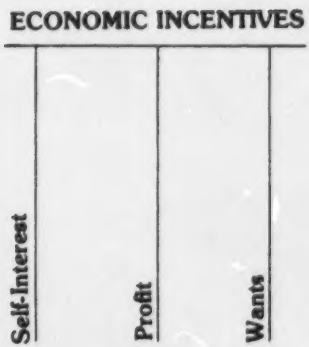
Concept Five: Economic Incentives

In the mixed market economy such as that of the United States, the greatest *economic incentive* behind economic behavior is *individual self-interest*. Whether they are consumers seeking to achieve maximum satisfaction of their *economic wants* with limited incomes, producers trying to increase their profits, or workers trying to earn the most possible income, all groups are motivated basically by their own self-interests. Adam Smith, commonly called the father of capitalism, wrote in the 1770s that a system governed by the incentive of self-interest will automatically lead to the greatest good for the greatest number in a society. According to his economic philosophy, if all people work for their own benefit, an efficient economic system will evolve. In the long run, according to Smith, this system will bring the greatest benefit to all members of the society. Obviously, Adam Smith's economic views were based on his value judgements. Nevertheless, it appears safe to say even today that a majority of Americans still share Adam Smith's views.

A major factor in the concept of *individual self-interest* is the profit motive. Profit plays a vital and often misunderstood role in a market economy. Profit (or loss) is a signal to producers. If profits are high in a given industry, it means that there is strong consumer demand for that particular product. High profits encourage other producers to enter the field and take advantage of this consumer demand. An example of this idea was the market for CB radios. When CB's first become popular items to purchase, there were only a few major manufacturers. They made great profits. Still, they were unable to keep up with the demand. Then, numerous other competitors entered the CB market. Consumer demands were met and profits for all producers leveled off. This is an example of *economic incentives* at work in the marketplace.

The type of competition seen in the CB market is a crucial requirement for an economy that operates on self-interest. If business firms do not have competition, there is little to prevent them from exploiting the consumer. Adam Smith believed that the invisible hand of competition forces a system that relies on self-interest and the profit motive to be fair to all or to at least most members of society. For this reason, the government of the United States is interested in maintaining as much competition as possible in American business. In those areas such as utilities where there is little competition, rates are set by some unit of government.

The concepts that relate to *economic incentives* are highly important to young people. Most students will agree that the philosophy of self-interest is basic to a market economy. However, many young people have misconceptions about the role of profit. Both students and the public in general suspect that the rates of profit are much higher than they actually are. They do not understand the important role that profit plays as a signal to producers. The schools should strive to help students to obtain a better understanding of the *economic incentives* that are basic to our economic system.


ECONOMIC INCENTIVES
Self-Interest
Profit
Wants

Concept Six: Specialization, Division of Labor, and Comparative Advantage

Modern industrial economies are based on the concept of *specialization*. Basically, *specialization* occurs when an individual, region, or country produces a narrower range of goods and services than they need. As an illustration, Texas tends to specialize in producing petroleum while Detroit tends to specialize in manufacturing automobiles. Both areas are better off as a result of this *specialization*.

Even within the industry of agriculture, we find *specialization*. Few farmers produce their own eggs and milk. They find it more economical to use their time to specialize in what they do best, perhaps growing feed grains, feeding hogs, or feeding cattle. Almost everyone specializes in what he or she does best. Our working time is spent on endeavors for which we receive income. Then we use our income to buy the goods and services produced by others who specialize in making things that we cannot make. This leads to a *division of labor*, in which productive tasks are then divided among workers in order to take advantage of worker specialization.

A companion concept of *specialization* and *division of labor* is the concept of *comparative advantage*. This idea merely takes *specialization* a bit further. For example, consider the comparison given above in which a comparison was made between Texas oil and automobile manufacturing in Detroit. We realize that Texas is better off because of this specialization. It would be inefficient in the production of automobiles because of an insufficient labor force and a lack of access to materials such as steel. The Detroit area would be relatively inefficient in large scale petroleum production because of the lack of that resource. This concept is called *comparative advantage*. In other words, in oil production Texas enjoys a *comparative advantage* over Detroit. On the other hand, Detroit enjoys a *comparative advantage* over Texas in manufacturing cars.

If countries specialize in what they can produce most efficiently (or at a *comparative advantage*) and trade those products with other nations in order to buy needed goods, they will have a higher standard of living than if they were self-sufficient. Two good examples are the United States which is an efficient producer of agricultural products and Japan which is an efficient producer of certain electronic products such as portable radios. Both nations are more prosperous economically when each country specializes in producing those things in which it has a comparative advantage and trades for the other things which it needs.

Specialization, *division of labor*, and *comparative advantage* are important concepts because they show how and why the United States has moved in 200 years from a nation of self-interest, self-employed farmers to basically a nation of employees. *Specialization* and the accompanying *division of labor* have led to a higher standard of living for each of us. Knowing and understanding these two concepts can help students to appreciate the complexity of the economic world in which they are expected to function. Knowledge of *comparative advantage* can help the student to

understand the reasons for trading with other nations, an ever-increasing factor in the economic lives of all Americans.

- **SPECIALIZATION**
  Agriculture
  Car Manufacturing
  Electronics

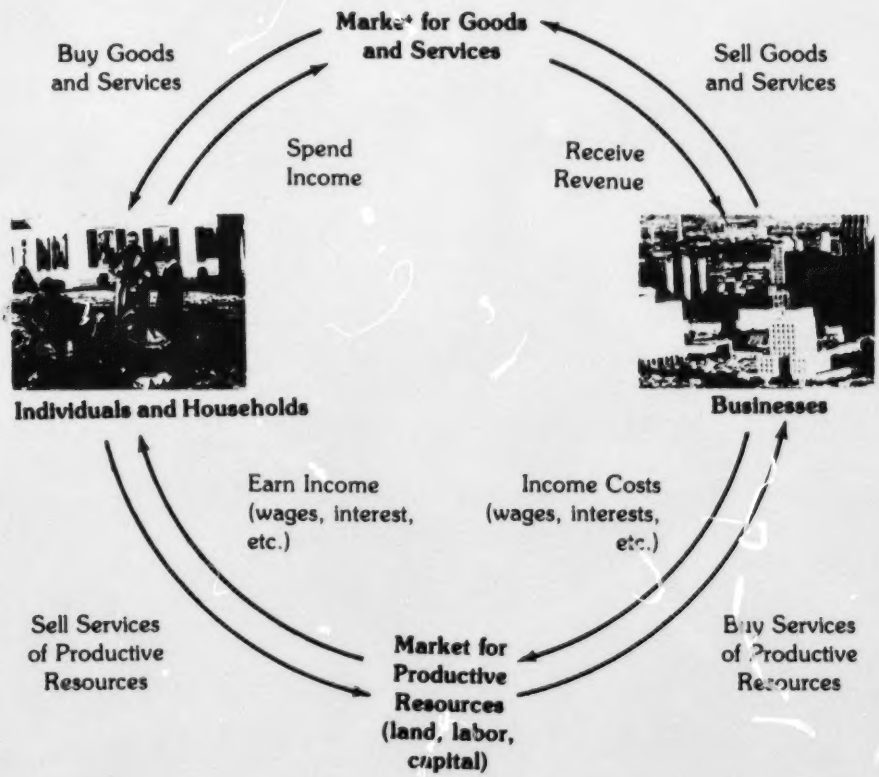
- **DIVISION OF LABOR**
  Assembly Line

- **COMPARATIVE ADVANTAGE**
  Japan
  United States

Concept Seven: Interdependence

In a specialized economy, the economic functions of people become highly interdependent. The following diagram illustrates this *interdependence* in the private sector of our economy.

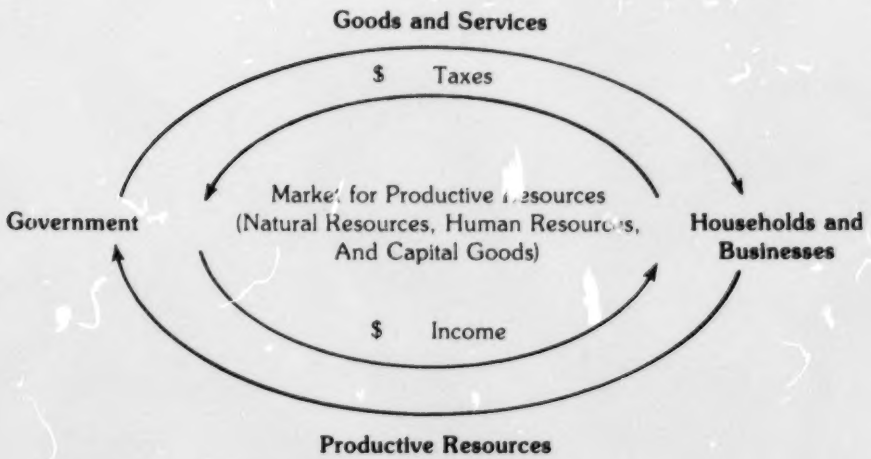
THE CIRCULAR FLOW OF ECONOMIC ACTIVITY


Market for Goods and Services
Buy Goods and Services
Sell Goods and Services
Spend Income
Receive Revenue
Individuals and Households
Businesses
Earn Income (wages, interest, etc.)
Income Costs (wages, interests, etc.)
Sell Services of Productive Resources
Buy Services of Productive Resources
Market for Productive Resources (land, labor, capital)

This model, which is called the *circular flow model*, shows how individuals and households make an income while working for businesses. In return, in the market for goods and services, the households become consumers, buying the goods and services that business has produced.

There is a continual flow between the business and household sectors of our economy. If, for some reason, that flow is disrupted, the economy will experience, at the least, a temporary problem. For example, if the individuals and households reduce their purchase of goods and services, there will be less need for *productive resources* (land, labor, and capital) on the part of the businesses. In turn, households as a group will have less income to spend, and the demand for goods and services will be further reduced. The situation we have just described would mean reduced business production, reduced consumer spending, and increased unemployment. It would probably be called a recession. The process also works in reverse. As consumers spend more of their income, businesses will need to use more *productive resources*. This will mean a larger income for the consumer. This situation would be called a period of economic expansion or prosperity.

Another circular flow of economic activity that should be mentioned to illustrate the *interdependence* of the economy of the United States is the relationship of flow of economic activity between government and the households and businesses of the nation.



Households and businesses request goods and services from various levels of government. In return, they pay for these goods and services with their taxes. To provide the collective goods and services, the government purchases *productive resources*. In return, more income is provided for the households and businesses.

Models that illustrate the *interdependence* of all facets of the market economy can give students a necessary overview of economic activity. The overview explains how an event that influences one segment of the economy can have an impact on all segments of the economy.

For example, many students in Texas cities think that agriculture has no impact on them. Let us assume that a young man is a construction worker in Lubbock. Assume that farm income in the state is down because of drouth and low commodity prices. Since much of the economic activity in Lubbock comes from the surrounding farm areas, a decline in economic activities in agriculture will cause a decline in retail sales in Lubbock. This slow down in economic activity may mean that workers will be laid off in businesses that produce products and services used in agriculture. All of these factors cause a lower level of economic activity. The result will be that businesses in the Lubbock area will not be likely to undertake new construction projects to expand their facilities. Also, there will probably be a slow down in residential construction. Due to this chain of events and the interdependent nature of all economic activity, the young construction worker who thought his life had little to do with agriculture is unable to find employment.

THE MARKET ECONOMY OF THE UNITED STATES

Concept Eight: Markets, Supply, and Demand

The *market* is the primary mechanism used in the United States to decide what is produced and who will receive it. It automatically tallies up the wants of the consumer *(demand)* and the ability of the producer *(supply)*. The market works out a level of production and a price for the product.

Supply indicates the amount that producers will be willing to produce at different prices at some specified time. The table below illustrates the concept of *supply*.

Price	Quantity Producers Will Supply
$2	1 million
3	2 million
4	3 million
5	4 million
6	5 million
7	6 million
8	7 million

The key generalizations that can be made about *supply* relate to price. At higher prices, producers will find it more profitable to produce greater and greater quantities. At lower prices, producers will produce smaller quantities. Some producers may halt production and seek a new product and a new market.

Demand indicates the amount that all consumers will purchase at given prices for a period of time. This table illustrates the concept of *demand*.

Price	Quantity Demand
$2	7 million
3	6 million
4	5 million
5	4 million
6	3 million
7	2 million
8	1 million

The key generalizations that can be made about *demand* relate to price. At lower prices, consumers will demand more and more of a good or service. At higher prices, consumers will demand less and less of a good or service. If the price becomes too high, most consumers may cease to make purchases or begin to search for alternatives.

By combining the amount that consumers will demand and the amount that producers will supply, we come up with the *market price* also called equilibrium price of our commodity and the amount that will be produced.

Price	Quantity Supplied	Quantity Demanded
$2	1 million	7 million
3	2 million	6 million
4	3 million	5 million
5	4 million	4 million
6	5 million	3 million
7	6 million	2 million
8	7 million	1 million

In our example, the forces of *supply* and *demand* will automatically settle on a market price of $5 and production level of 4 million. Notice that if producers are selling at $7, the supply will exceed demand and automatically move toward the market price. Conversely, if producers are selling at $3, the demand will exceed supply, and prices will rise toward the market price.

It hardly seems necessary to present a rationale for including the study of *supply* and *demand* in basic economic concepts. Usually, when adults are asked about economic concepts, the concepts of *supply* and *demand* are those most often mentioned. The applications of *supply* and *demand* and *price mechanism* (see page 23) should give students some insights into a countless number of situations and problems that they will encounter in their lives.

Concept Nine: The Price Mechanism

The economic concept of *price mechanism* refers to the fact that market prices are the primary ways of distributing scarce resources among the unlimited wants of the American people. No one tells producers what to produce. However, consumer demand is usually a good indication about what will sell. Producers will then respond to that demand by producing more of a good or service.

Prices act as signals to everyone in the economy. They help the producer, the householder, and the worker to decide which economic decisions are best. Of course, each of these major sectors of our economy works toward satisfying its own economic self-interest. This approach to allocating goods and services is flexible. It is also responsive to the wants of the consumer.

A companion role of prices is to distribute scarce resources carefully. For example, the price of products in short supply will rise. Consequently, some consumers will be priced out of the market. This method of distribution for some goods and services such as food, shelter, and health care raises some important issues. Students should be given the opportunity to discuss the implications of distributing those goods and services in this way.

Perhaps the best way to illustrate the importance of the concepts of *markets, supply, demand,* and *prices* is to look at the gasoline situation. One of the United States' basic problems is that we consume a high amount of imported oil. This causes a serious outflow of money from the U.S. In addition, we use scarce and nonrenewable petroleum resources at a rapid pace.

Through public relations campaigns, oil companies have tried to explain the energy problem to the American public. Oil companies feel they need higher prices for gasoline. The increased income would be used to provide capital and the incentive to expand the supply of oil and to develop alternate energy sources. That line of reasoning is basically consistent with the concepts of supply and demand. At higher prices, competitive producers will produce more.

On the other hand, the concept of *demand* implies that at higher prices people demand less. If this concept operates as expected, the objective of slowing the growth of the consumption of gasoline should be achieved. One of the problems in dealing with gasoline prices is that no one is absolutely sure to what degree demand will respond to increases in price. The concept of demand has with it a degree of elasticity. How responsive the changes in demand will be to the changes in price is not easy to predict.

The *price mechanism* plays an important role in the issue of gasoline prices. By using the *price mechanism* (higher prices) to cut consumption, the serious question of equity or fairness is raised. Presidents Richard M. Nixon, Gerald R. Ford, and Jimmy Carter all proposed an excise tax on gasoline to raise the price to restrict consumption. It is important for young people to examine the problem carefully and to decide if they consider reliance on the *price mechanism* to be a fair and equitable approach.

An alternative to using an excise tax is to decontrol the industry and let *supply, demand,* and *price mechanism* run their course. This is the traditional approach that has been used to deal with economic problems. However, in this case the risk of not having a planned and coordinated effort to deal with the issue of gasoline prices may be too high.

Another approach to the problem of allocating gasoline equitably is to put a system of rationing into operation. This type of system may be fairer than relying on the *price mechanism*. It would, however, be a major departure from our traditional approach of the free market mechanism. Therefore, it would require a substantial bureaucracy to administer the program. It might provide conditions under which black markets as well as other illegal activities would occur. Basically, what would happen is that prices would be held artificially low, and quantity demanded would exceed quantity supplied. In such a case, prices could no longer serve the function of allocating the supply.

There are numerous areas of the economy that can be used to illustrate the concept of the *price mechanism* and its relationship to current economic issues. Several are the various areas of energy, health care, and prices for farm products. A knowledge of *supply, demand, markets,* and *prices* can provide students with a conceptual background that will be helpful to them in examining economic problems in our society. A knowledge of economic concepts can also provide students with a set of analytical tools that they can use to help them make rational decisions on a wide variety of public policy issues. It can also give them an understanding of the society in which they live.

PRICE MECHANISM
MARKET PRICES

- **Markets**
- **Supply**
- **Demand**
- **Prices**

Concept 10: Aggregate Supply and Productive Capacity

The next family of concepts—*aggregate demand*, *aggregate supply*, *money* and *monetary policy*, *fiscal policy*, and *saving* and *investment*—should be viewed together. They deal with the functioning of the economy as a whole in areas such as total output, employment, and inflation. Two of the concepts, *monetary policy* and *fiscal policy*, deal with the major ways that the United States has developed to deal with the fluctuations and instability in the economy.

Aggregate supply and *productive capacity* both refer to the total amount of goods and services an economy can produce when all of its *productive resources* (human resources, natural resources, and capital goods) are in use. This amount of total production is fixed at any given point. However, it can be increased by making more *productive resources* available or by improving efficiency in the use of existing resources. In short, this concept refers to the maximum possible production at any given time and how that level of production may be increased over time.

Concept 11: Aggregate Demand— Unemployment and Inflation

The concept of *aggregate demand* refers to the total amount spent for goods and services by consumers. This list of consumers includes individuals, households, businesses, and governments. The balance between exports and imports is also a factor in *aggregate demand*. A point of clarification may be necessary with regard to imports and exports. The money received by American business firms for exports is money coming into the country. This incoming money is a positive addition to *aggregate demand*. In the last several years, the United States has been importing substantially more than we export, thereby exerting a drag on the total demand.

When *aggregate demand* falls substantially below what the economy is capable of producing at full employment, workers will be laid off and production capacity will be idle. Consequently, an economic recession will occur. A recession is characterized by reduced levels of production and high unemployment. This situation causes serious social and economic disruption and hardship for those who have become unemployed. It is easy to think of unemployment merely as a number or statistic. However students can discuss and learn to recognize the human cost of unemployment both in financial and sychological terms.

When *aggregate demand* exceeds *productive capacity*, inflation occurs. Demand pull is the traditional type of inflation. It is characterized by too many dollars chasing too few goods. Under those economic circumstances, economic activity is usually characterized by very high levels of production and full employment.

In fact, there are often jobs that cannot be filled. Economic planners try to keep *aggregate supply* and *aggregate demand* in some kind of rough balance so that there are fewer social and economic disruptions in our society. That is the goal of *fiscal* and *monetary policies* (see pages 28-30).

Not all inflation and unemployment are the result of imbalances in *aggregate supply* and *aggregate demand*. Some people will remain unemployed even in times of prosperity. These individuals may not have the skills necessary to fill the jobs available. Another reason for some people remaining unemployed is their location. They may live in chronically depressed areas where there is little employment potential. In recent years, the United States has been experiencing inflation even when *aggregate demand* is not too high. The cost of energy, actions of business and employee organizations in key industries, rapid increases in the money supply, government regulations, and supply shortages in specific markets have all contributed to the kind of inflation that is not caused by *aggregate demand*. This type of inflation is called cost-push inflation and is becoming an increasingly serious problem in the United States.

The concepts of *aggregate supply* and *aggregate demand* give students the theoretical background to understand the reasons behind instability in the economy. At a time when we are having increased difficulties in maintaining a stable economy, every

American should understand the root causes of unemployment and inflation. Such an understanding will help students become responsible citizens and vote intelligently on public policy issues.

- **Aggregate supply—the total amount of goods and services an economy can produce**

- **Aggregate demand—the total amount spent for goods and services by consumers**

Concept 12: Money and Monetary Policy

Many individuals think that money is either currency or coin in the United States economy. Actually, currency and coins account for only about 20 to 25 percent of our money supply. The rest of our money supply simply exists as demand deposits (checking accounts). The banking system can expand the supply of money by making loans to businesses, individuals, or governments. In turn, these loans create additional demand deposits which expand that component of the money supply. In this manner, the banking system has a direct impact on *aggregate demand*.

The Federal Reserve System is responsible for controlling the activities of the banking system in ways that either expand or restrict *aggregate demand*. In general, the Federal Reserve System influences the cost of credit and the size of the money supply toward those ends.

The Federal Reserve System has three specific policies that it uses; these policies are referred to as *monetary policies*. They are as follows:

- *Reserve Requirements*—The Federal Reserve System has the power to tell banks how much of their deposits they must retain as reserves. Generally, these required reserves are approximately 15 percent of the deposits of the bank. In a recession, the Federal Reserve System probably would follow a loose money policy that would lower the reserve requirement to enable banks to make more loans and thus increase *aggregate demand*. In an inflationary period, the opposite action would probably take place.

- *Rediscount Rate*—This policy refers to the rate of interest that member banks are charged when they borrow from the Federal Reserve System. Although the Federal Reserve System does not directly set interest rates for individual borrowers, it does influence interest rates and borrowing through its policies. When the Federal Reserve System is following a loose money policy, it lowers the rediscount rate. As a result, bank interest rates also decline. Then, total spending in the economy is stimulated. Lower interest rates should be an inducement to business to borrow more money. Conversely, when total spending is too high, the Federal Reserve System raises the rediscount rate. This action raises interest rates and discourages borrowing.

- *Open Market Operations*—This policy is generally considered to be the most effective and most commonly used *monetary policy*. It involves the purchase and sale of government securities (the national debt) between the Federal Reserve System and private institutions such as banks and insurance companies. In a period of low total spending, the Federal Reserve System will buy the securities from the institutions in the private sector. This money from the Federal Reserve System will end up in the banking system. It will give banks more money to make available to borrowers, thus expanding demand. In a period of excessive total spending, the process works in reverse. The Federal Reserve System will

sell the securities to the private sector. Money will be pulled out of circulation. Total demand will be restricted.

Since inflation is caused by too much money chasing too few goods and services, the size of the money supply must be carefully determined by the Federal Reserve. This is a very complex task since individuals, businesses, and government are generally seeking additional money to satisfy their wants.

There is honest disagreement among economists concerning exactly what the *monetary policy* should be at a given time. Despite these disagreements, the general principles of *monetary policy* are in constant use in efforts to keep the economy stable.

Concept 13: Fiscal Policy

Fiscal policy refers to the taxing and spending policies of the federal government. In periods of recession and high unemployment, the federal government may seek to create employment and to put more spending money into the economy. This is done by increasing government spending and by holding taxes at their current level. It could also be done by increasing government spending and by cutting taxes. In either case, the government will run a deficit to pump more spending money into the economy to deal with the problem of inadequate *aggregate demand*.

When the economy is in a period of demand inflation, which is characterized by excessive *aggregate demand*, the government may raise taxes and/or cut spending. By taking this kind of action, the government will cause a budget surplus that will pull money out of circulation.

- **Fiscal policy—taxing and spending policies of the federal government**

- **Aggregate demand—the total amount spent for goods and services by consumers**

- **Aggregate supply—the total amount of goods and services an economy can produce**

Concept 14: Saving and Investment

Saving and *investment* are important concepts because they are key factors in economic growth. Most Americans believe that we should continue to strive to increase our standard of living. This means that our economy must continue to grow. In fact, it must grow to some degree just to keep up with the population growth. All of the goods and services in the economy can be viewed as a giant pie. Without economic growth and with an increasing population, the size of the piece of pie for each of us would be smaller.

Basically, we have two choices as to what we will do with our income. We can spend it for consumption, or we can save it for future use. It is vitally important for any economy that people save a certain amount of their income. The economy needs these savings so that it can produce goods and services in the future. When savings are used to increase the productive capacity of the economy, investment has occurred. The savings may be used to train or to educate human resources, to develop technology, to develop new factories, and to replace plants and equipment that have worn out.

The concepts of *saving* and *investment* are related closely to the *market mechanism*. High prices and high profits will cause both individuals and businesses to invest their savings. Investors must feel that there will be an adequate return on their *investment*. When they are assured of an adequate return, they will be able to commit their resources to a particular enterprise. Some people feel that we are faced with a "capital crisis" in the United States today. Some people feel that it will be difficult to provide the capital that is necessary to sustain our standard of living. For example, it will take immense amounts of *savings* and *investments* to provide the research and development that is necessary to develop alternative sources of energy.

An understanding of these concepts is very important to Americans. We must recognize the necessity of *saving* and *investment*. We must also be willing to take the necessary steps to ensure that there are adequate capital goods available. Failure to meet this challenge will ultimately lead to a declining standard of living.

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;
(2) operation of school bus routes or runs on a non-segregated basis;
(3) nondiscrimination in extracurricular activities and the use of school facilities;
(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;
(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;
(6) nondiscriminatory practices relating to the use of a student's first language; and
(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.